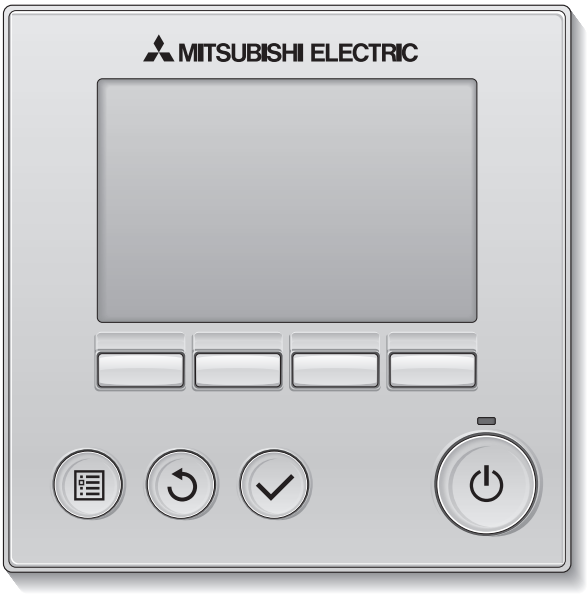
MITSUBISHI ELECTRIC

CITY MULTI Control System
and Mitsubishi Mr. Slim Air Conditioners

MA Remote Controller PAR-31MAA

Instruction Book

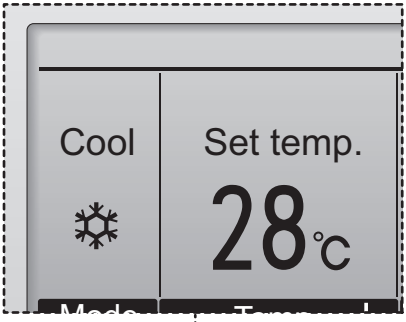


Prior to use, thoroughly read the instructions in this manual to use the product correctly.
Retain for future reference.
Make sure that this CD-ROM and the Installation Manual are passed on to any future users.
To ensure safety and proper operation of the remote controller, the remote controller should only be installed by qualified personnel.

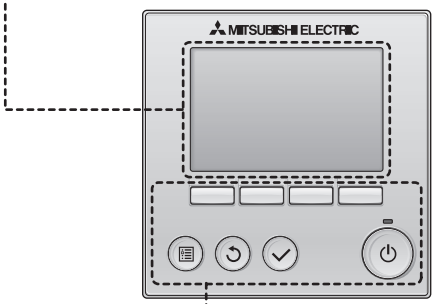
Product features

Feature 1

Large, easy-to-see display



Full-dot LCD display with large characters for easy viewing

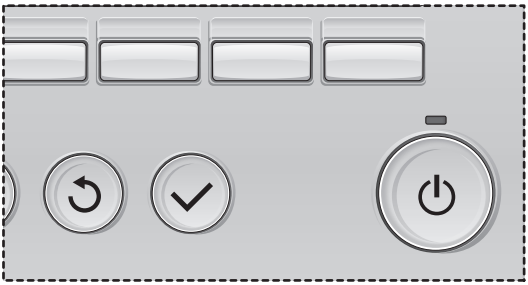


Feature 2

Simple button arrangement

Feature 3

Large, easy-to-press buttons



Buttons are arranged according to usage to allow for intuitive navigation.

Frequently used buttons are larger than other buttons to prevent unintended pressing of other buttons.

Contents

Safety precautions 4

Names and functions of controller components..... 6

Controller interface 6
Display 8

Read before operating the controller 10

Menu structure 10
Icon explanations 11

Basic operations 12

Power ON/OFF 12
Operation mode, temperature, and fan speed settings 14

Navigating through the menu 18

Main menu list 18
Restrictions for the sub remote controller 19
Navigating through the Main menu 20

Controller operation-Function settings 22

Vane•Louver•Vent. (Lossnay) 22
High power 24
Clock 25
Timer (On/Off timer) 26
(Auto-Off timer) 28
Weekly timer 30
OU silent mode 32
Restriction 34
Energy saving 38
Night setback 42
Manual vane angle 44
Main display 46
Contrast 47
Language selection 48
Function setting 50

Maintenance 52

Filter information 52

Troubleshooting 54

Error information 54

Specifications 56

Safety precautions

- Thoroughly read the following safety precautions before using the unit.
- Observe these precautions carefully to ensure safety.

⚠ **WARNING**	Indicates a risk of death or serious injury.
⚠ **CAUTION**	Indicates a risk of serious injury or structural damage.

- After reading this manual, pass it on to the end user to retain for future reference.
- Keep this manual for future reference and refer to it as necessary. This manual should be made available to those who repair or relocate the controller. Make sure that the manual is passed on to any future users.

General precautions

⚠ WARNING

Do not install the unit in a place where large amounts of oil, steam, organic solvents, or corrosive gases, such as sulfuric gas, are present or where acidic/alkaline solutions or sprays are used frequently. These substances can compromise the performance of the unit or cause certain components of the unit to corrode, which can result in electric shock, malfunctions, smoke, or fire.

To reduce the risk of shorting, current leakage, electric shock, malfunctions, smoke, or fire, do not wash the controller with water or any other liquid.

To reduce the risk of electric shock, malfunctions, smoke or fire, do not operate the switches/buttons or touch other electrical parts with wet hands.

When disinfecting the unit using alcohol, ventilate the room adequately. The fumes of the alcohol around the unit may cause a fire or explosion when the unit is turned on.

To reduce the risk of injury or electric shock, before spraying a chemical around the controller, stop the operation and cover the controller.

To reduce the risk of injury or electric shock, stop the operation and switch off the power supply before cleaning, maintaining, or inspecting the controller.

If any abnormality (e.g., burning smell) is noticed, stop the operation, turn off the power switch, and consult your dealer. Continued use of the product may result in electric shock, malfunctions, or fire.

Properly install all required covers to keep moisture and dust out of the controller. Dust accumulation and water can cause electric shock, smoke, or fire.

⚠ CAUTION

To reduce the risk of fire or explosion, do not place flammable materials or use flammable sprays around the controller.

To reduce the risk of damage to the controller, do not directly spray insecticide or other flammable sprays on the controller.

To reduce the risk of environmental pollution, consult an authorized agency for proper disposal of remote controller.

To reduce the risk of electric shock or malfunctions, do not touch the touch panel, switches, or buttons with a pointy or sharp object.

To reduce the risk of injury and electric shock, avoid contact with sharp edges of certain parts.

To avoid injury from broken glass, do not apply excessive force on the glass parts.

To reduce the risk of injury, wear protective gear when working on the controller.

Precautions for moving or repairing the controller

⚠ WARNING

The controller should be repaired or moved only by qualified personnel. Do not disassemble or modify the controller.
Improper installation or repair may cause injury, electric shock, or fire.

⚠ CAUTION

To reduce the risk of shorting, electric shock, fire, or malfunction, do not touch the circuit board with tools or with your hands, and do not allow dust to accumulate on the circuit board.

Additional precautions

To avoid damage to the controller, use appropriate tools to install, inspect, or repair the controller.

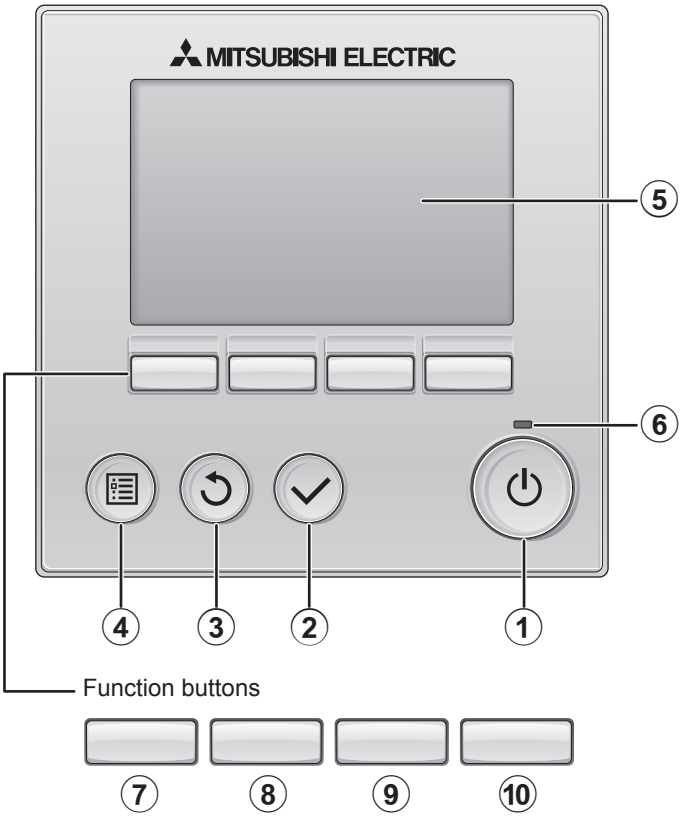
This controller is designed for exclusive use with the Building Management System by Mitsubishi Electric. The use of this controller for with other systems or for other purposes may cause malfunctions.

To avoid discoloration, do not use benzene, thinner, or chemical rag to clean the controller. To clean the controller, wipe with a soft cloth soaked in water with mild detergent, wipe off the detergent with a wet cloth, and wipe off water with a dry cloth.

To avoid damage to the controller, provide protection against static electricity.

Names and functions of controller components

Controller interface



① ON/OFF button

Press to turn ON/OFF the indoor unit.

② SELECT button

Press to save the setting.

③ RETURN button

Press to return to the previous screen.

④ MENU button Page 20

Press to bring up the Main menu.

⑤ Backlit LCD

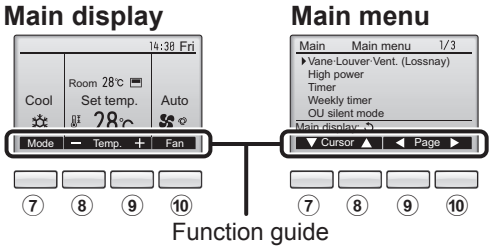
Operation settings will appear.
When the backlight is off, pressing any button turns the backlight on and it will stay lit for a certain period of time depending on the screen.

When the backlight is off, pressing any button turns the backlight on and does not perform its function. (except for the ON/OFF button)

⑥ ON/OFF lamp

This lamp lights up in green while the unit is in operation. It blinks while the remote controller is starting up or when there is an error.

The functions of the function buttons change depending on the screen. Refer to the button function guide that appears at the bottom of the LCD for the functions they serve on a given screen.
When the system is centrally controlled, the button function guide that corresponds to the locked button will not appear.



⑦ Function button F1

Main display: Press to change the operation mode.
Main menu: Press to move the cursor down.

⑧ Function button F2

Main display: Press to decrease temperature.
Main menu: Press to move the cursor up.

⑨ Function button F3

Main display: Press to increase temperature.
Main menu: Press to go to the previous page.

⑩ Function button F4

Main display: Press to change the fan speed.
Main menu: Press to go to the next page.

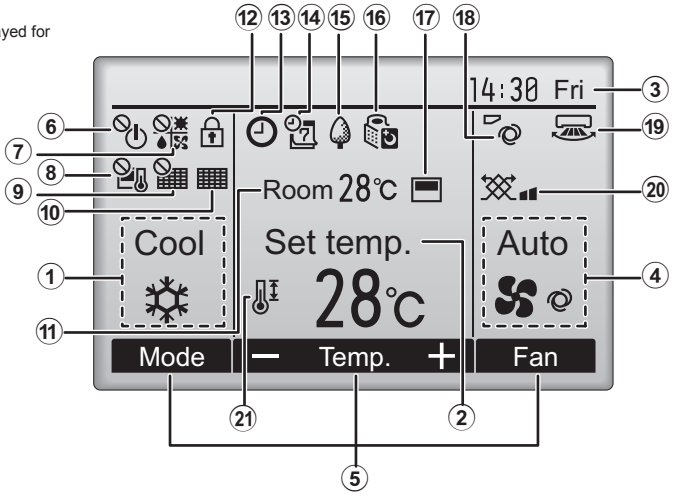
Names and functions of controller components

Display

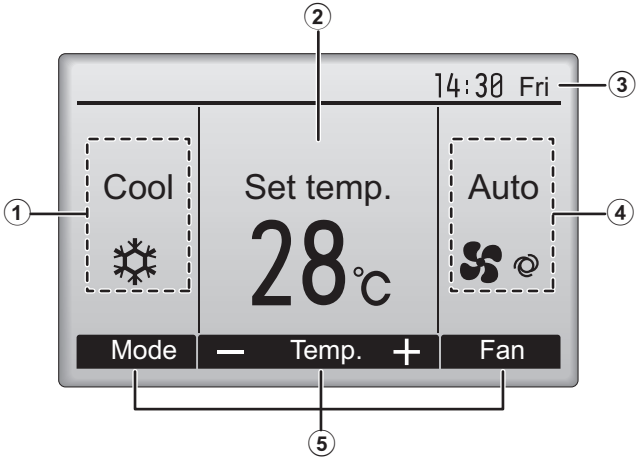
The main display can be displayed in two different modes: "Full" and "Basic." The factory setting is "Full." To switch to the "Basic" mode, change the setting on the Main display setting. (Refer to page 46.)

Full mode

* All icons are displayed for explanation.



Basic mode



①Operation mode Page 14

Indoor unit operation mode appears here.

②Preset temperature Page 15

Preset temperature appears here.

③Clock (See the Installation Manual.)

Current time appears here.

④Fan speed Page 16

Fan speed setting appears here.

⑤Button function guide

Functions of the corresponding buttons appear here.

⑥

Appears when the ON/OFF operation is centrally controlled.

⑦

Appears when the operation mode is centrally controlled.

⑧

Appears when the preset temperature is centrally controlled.

⑨

Appears when the filter reset function is centrally controlled.

⑩ Page 52

Indicates when filter needs maintenance.

⑪Room temperature (See the Installation Manual.)

Current room temperature appears here.

⑫ Page 36

Appears when the buttons are locked.

⑬ Page 26, 28, 42

Appears when the On/Off timer (Page 26), Night setback (Page 42), or Auto-off timer (Page 28) function is enabled.

appears when the timer is disabled by the centralized control system.

⑭ Page 30

Appears when the Weekly timer is enabled.

⑮ Page 40

Appears while the units are operated in the energy-save mode. (Will not appear on some models of indoor units)

⑯ Page 32

Appears while the outdoor units are operated in the silent mode.

⑰

Appears when the built-in thermistor on the remote controller is activated to monitor the room temperature (⑪).

appears when the thermistor on the indoor unit is activated to monitor the room temperature.

⑱ Page 22

Indicates the vane setting.

⑲ Page 23

Indicates the louver setting.

⑳ Page 23

Indicates the ventilation setting.

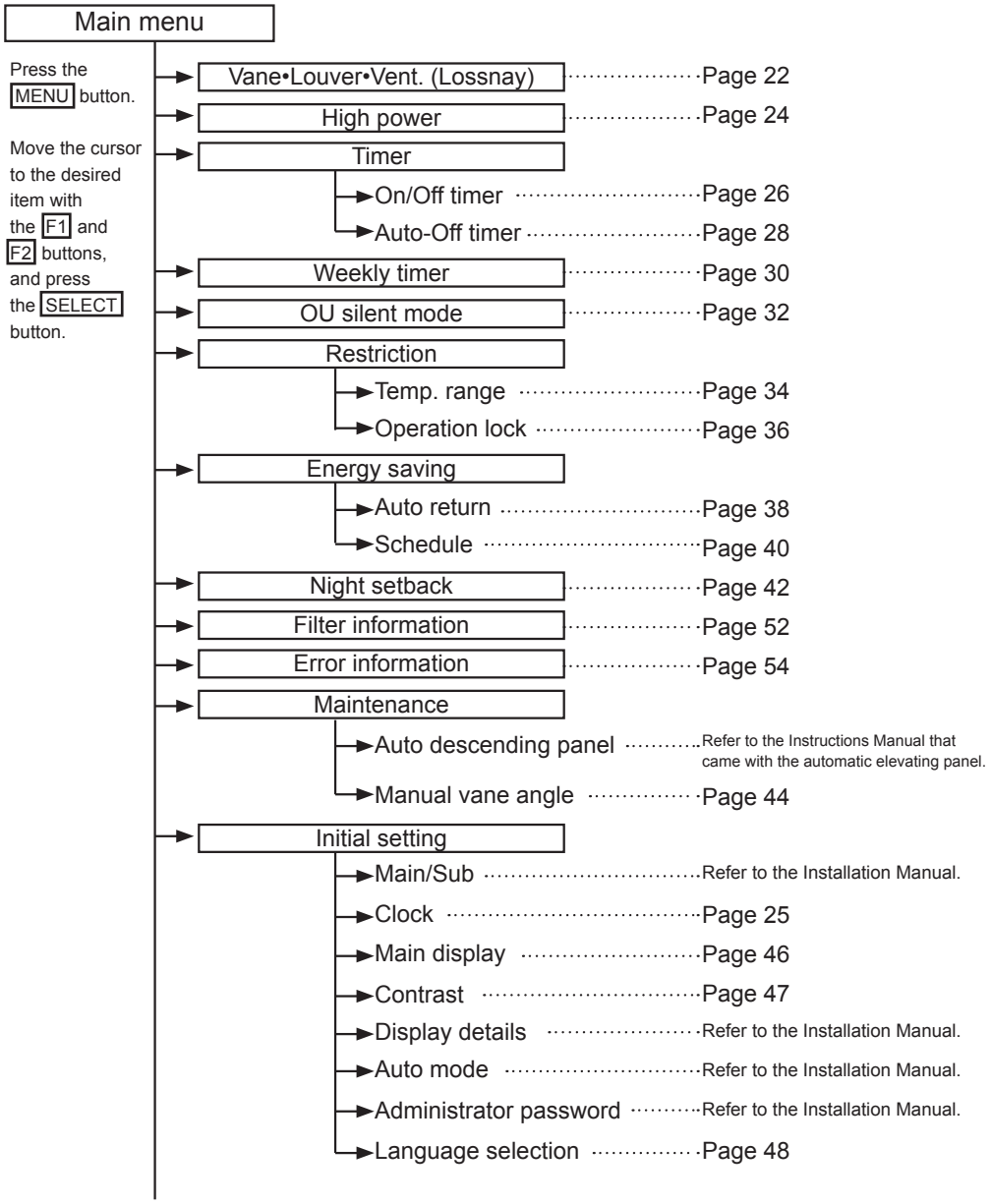
㉑ Page 34

Appears when the preset temperature range is restricted.

Most settings (except ON/OFF, mode, fan speed, temperature) can be made from the Menu screen. (Refer to page 20.)

Read before operating the controller

Menu structure



- Service
  - Test run ····· Refer to the indoor unit Installation Manual.
  - Input maintenance info. ····· Refer to the indoor unit Installation Manual.
  - Function setting (Mr. Slim) ····· Refer to the Installation Manual.
  - Function setting (City Multi) ····· Refer to page 50.
  - Lossnay (City Multi only) ····· Refer to the Installation Manual.
  - Check ····· Refer to the indoor unit Installation Manual.
  - Self check ····· Refer to the Installation Manual.
  - Maintenance password ····· Refer to the Installation Manual.
  - Remote controller check ····· Refer to the Installation Manual.

Not all functions are available on all models of indoor units.

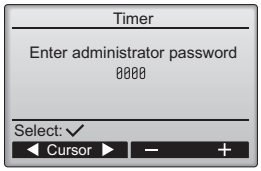
Icon explanations

Controller operation

Timer

P

The table below summarizes the square icons used in this manual.

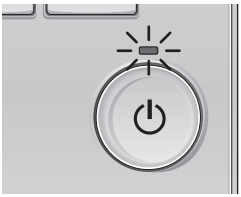
P	The administrator or maintenance user password must be entered on the password input screen to change settings. There is no settings that can skip this process.  F1 : Press to move the cursor left. F2 : Press to move the cursor right. F3 : Press to decrease the value by 1. F4 : Press to increase the value by 1. *Changes cannot be made unless the correct password is entered.	Main	Indicates settings that can be made only from the main remote controller.
ON	Indicates settings that can be changed only while the units are in operation.	OFF	Indicates settings that can be changed only while the units are not in operation.
	Indicates settings that can be changed only while the units are operated in the Cool, Heat, or Auto mode.		Indicates functions that are not available when the buttons are locked or the system is centrally controlled.

Basic operations

Power ON/OFF

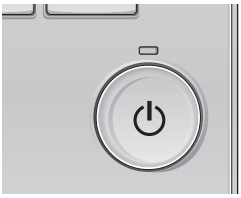
Button operation

ON



Press the ON/OFF button.
The ON/OFF lamp will light up in green, and the operation will start.

OFF



Press the ON/OFF button again.
The ON/OFF lamp will come off, and the operation will stop.

Operation status memory

	Remote controller setting
Operation mode	Operation mode before the power was turned off
Preset temperature	Preset temperature before the power was turned off
Fan speed	Fan speed before the power was turned off

Settable preset temperature range

Operation mode	Preset temperature range
Cool/Dry	19 ~ 30 ºC (67 ~ 87 ºF)
Heat	17 ~ 28 ºC (63 ~ 83 ºF)
Auto (Single set point)	19 ~ 28 ºC (67 ~ 83 ºF)
Auto (Dual set points)	[Cool] Preset temperature range for the Cool mode [Heat] Preset temperature range for the Heat mode
Fan/Ventilation	Not settable

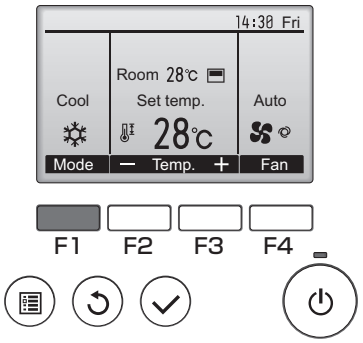
The settable temperature range varies with the model of indoor units.

Basic operations

Operation mode, temperature, and fan speed settings

Button operation

Operation mode



Press the F1 button to go through the operation modes in the order of "Cool, Dry, Fan, Auto, and Heat." Select the desired operation mode.

Cool Dry Fan

Auto Heat

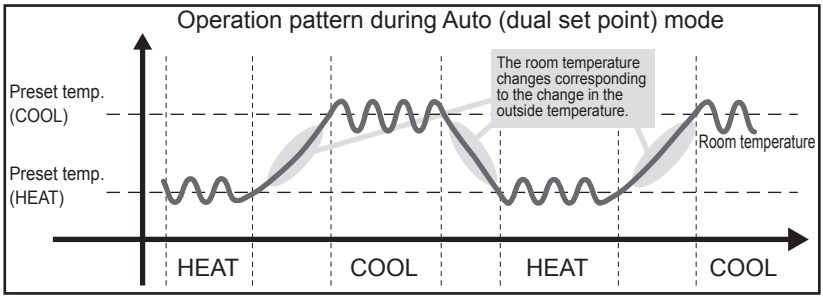
•Operation modes that are not available to the connected indoor unit models will not appear on the display.

What the blinking mode icon means
The mode icon will blink when other indoor units in the same refrigerant system (connected to the same outdoor unit) are already operated in a different mode. In this case, the rest of the unit in the same group can only be operated in the same mode.

<AUTO (dual set point) mode>

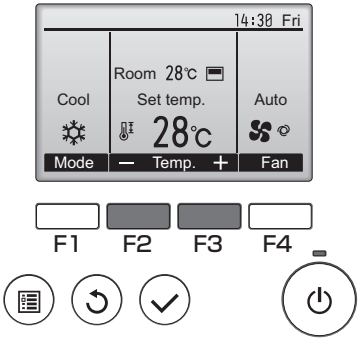
When the operation mode is set to the Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.

The graph below shows the operation pattern of indoor unit operated in the Auto (dual set point) mode.



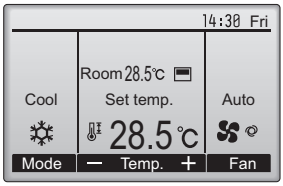
Preset temperature

<Cool, Dry, Heat, and Auto (single set point)>



Press the F2 button to decrease the preset temperature, and press the F3 button to increase.

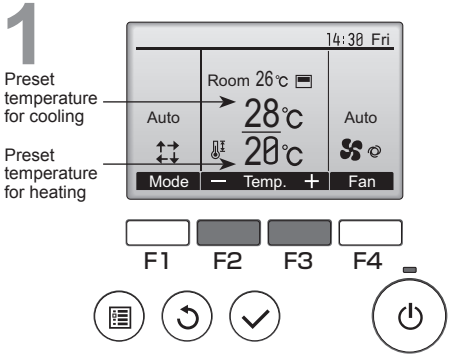
- Refer to the table on page 13 for the settable temperature range for different operation modes.
- Preset temperature range cannot be set for Fan/ Ventilation operation.
- Preset temperature will be displayed either in Centigrade in 0.5- or 1-degree increments, or in Fahrenheit, depending on the indoor unit model and the display mode setting on the remote controller.



Example display
(Centigrade in 0.5-degree increments)

<Auto (dual set point) mode>

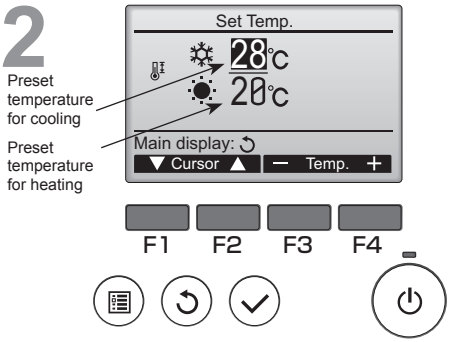
1



The current preset temperatures will appear. Press the F2 or F3 button to display the Settings screen.

Basic operations

2



Press the F1 or F2 button to move the cursor to the desired temperature setting (cooling or heating).

Press the F3 button to decrease the selected temperature, and F4 to increase.

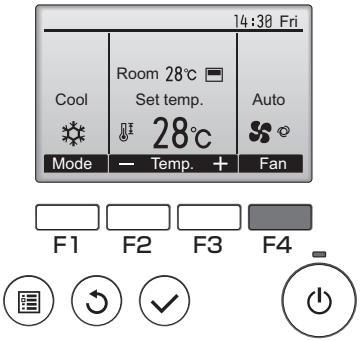
- Refer to the table on page 13 for the settable temperature range for different operation modes.
- The preset temperature settings for cooling and heating in the Auto (dual set point) mode are also used by the Cool/Dry and Heat modes.
- The preset temperatures for cooling and heating in the Auto (dual set point) mode must meet the conditions below:
  - Preset cooling temperature is higher than preset heating temperature.
  - The minimum temperature difference requirement between cooling and heating preset temperatures (varies with the models of indoor units connected) is met.

  * If preset temperatures are set in a way that does not meet the minimum temperature difference requirement, both preset temperatures will automatically be changed within the allowable setting ranges.

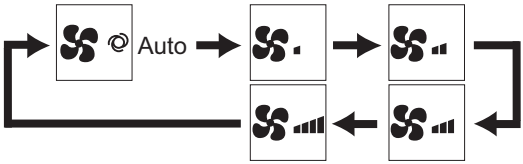
Navigating through the screens

- To return to the Main screen ..... RETURN button

Fan speed



Press the F4 button to go through the fan speeds in the following order.



- The available fan speeds depend on the models of connected indoor units.

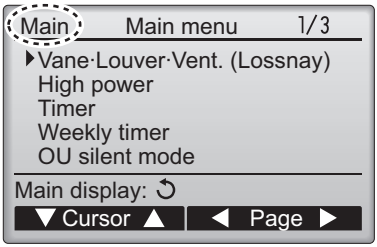
Navigating through the menu

Main menu list

Setting and display items		Setting details	Reference page
Vane•Louver•Vent. (Lossnay)		**Use to set the vane angle.** •Select a desired vane setting from five different settings. **Use to turn ON/OFF the louver.** •Select a desired setting from "ON" and "OFF." **Use to set the amount of ventilation.** •Select a desired setting from "Off," "Low," and "High."	22
High power		**Use to reach the comfortable room temperature quickly.** •Units can be operated in the High-power mode for up to 30 minutes.	24
Timer	**On/Off timer**	**Use to set the operation On/Off times.** •Time can be set in 5-minute increments. * Clock setting is required.	26
	Auto-Off timer	**Use to set the Auto-Off time.** •Time can be set to a value from 30 to 240 in 10-minute increments.	28
Weekly timer		**Use to set the weekly operation On/Off times.** •Up to eight operation patterns can be set for each day. * Clock setting is required. * Not valid when the On/Off timer is enabled.	30
OU silent mode		**Use to set the time periods in which priority is given to quiet operation of outdoor units over temperature control. Set the Start/Stop times for each day of the week.** •Select the desired silent level from "Normal," "Middle," and "Quiet." * Clock setting is required.	32
Restriction	**Temp. range**	**Use to restrict the preset temperature range.** •Different temperature ranges can be set for different operation modes.	34
	Operation lock	**Use to lock selected functions.** •The locked functions cannot be operated.	36
Energy saving	**Auto return**	**Use to get the units to operate at the preset temperature after performing energy-save operation for a specified time period.** •Time can be set to a value from 30 and 120 in 10-minute increments. * This function will not be valid when the preset temperature ranges are restricted.	38
	Schedule	**Set the start/stop times to operate the units in the energy-save mode for each day of the week, and set the energy-saving rate.** •Up to four energy-save operation patterns can be set for each day. •Time can be set in 5-minute increments. •Energy-saving rate can be set to a value from 0% and 50 to 90% in 10% increments. * Clock setting is required.	40

Setting and display items		Setting details	Reference page
Night setback		**Use to make Night setback settings.** •Select "Yes" to enable the setting, and "No" to disable the setting. The temperature range and the start/stop times can be set. * Clock setting is required.	42
Filter information		**Use to check the filter status.** •The filter sign can be reset.	52
Error information		**Use to check error information when an error occurs.** •Error code, error source, refrigerant address, unit model, manufacturing number, contact information (dealer's phone number) can be displayed. * The unit model, manufacturing number, and contact information need to be registered in advance to be displayed.	54
Maintenance	**Manual vane angle**	**Use to set the vane angle for each vane to a fixed position.**	44
Initial setting	**Clock**	**Use to set the current time.**	25
	Main display	**Use to switch between "Full" and "Basic" modes for the Main display.** •The default setting is "Full."	46
	Contrast	**Use to adjust screen contrast.**	47
	Language selection	**Use to select the desired language.**	48
Service	**Function setting (City Multi)**	**Use to make settings for indoor unit's functions.**	50

Restrictions for the sub remote controller



The following settings cannot be made from the sub remote controller. Make these settings from the main remote controller. "Main" is displayed in the title of the Main menu on the main remote controller.

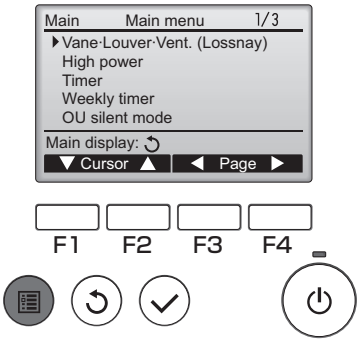
- **Timer (On/Off timer, Auto-Off timer)**
- **Weekly timer**
- **OU silent mode**
- **Energy saving (Auto return, Schedule)**
- **Night setback**
- **Maintenance (Manual vane angle)**

Navigating through the menu

Navigating through the Main menu

Button operation

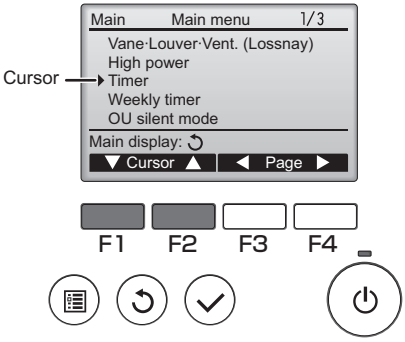
Accessing the Main menu



Press the MENU button.

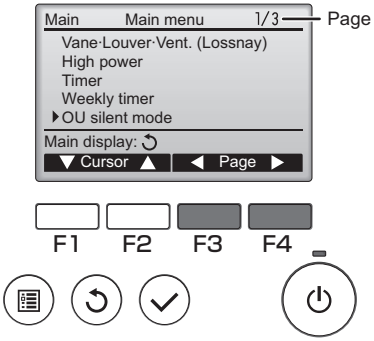
The Main menu will appear.

Item selection



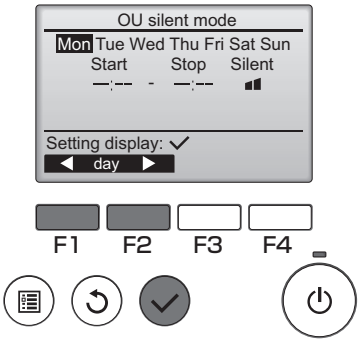
Press F1 to move the cursor down.
Press F2 to move the cursor up.

Navigating through the pages



Press F3 to go to the previous page.
Press F4 to go to the next page.

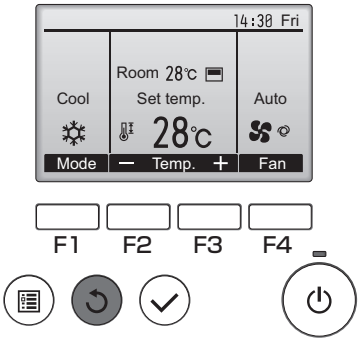
Saving the settings



Select the desired item, and press the SELECT button.

The screen to set the selected item will appear.

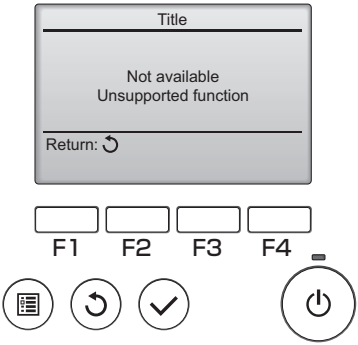
Exiting the Main menu screen



Press the RETURN button to exit the Main menu and return to the Main display.

If no buttons are touched for 10 minutes, the screen will automatically return to the Main display. Any settings that have not been saved will be lost.

Display of unsupported functions



The message at left will appear if the user selects a function not supported by the corresponding indoor unit model.

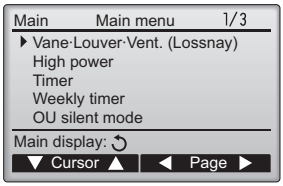
Controller operation-Function settings

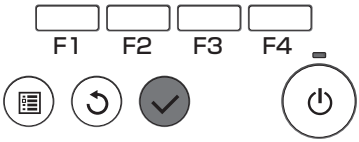
Vane•Louver•Vent. (Lossnay)

ON

Button operation

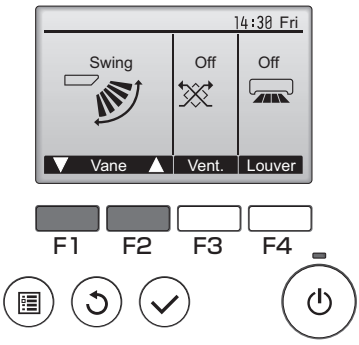
Accessing the menu





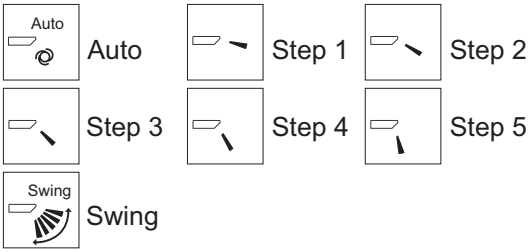
Select "Vane•Louver•Vent. (Lossnay)" from the Main menu (refer to page 20), and press the SELECT button.

Vane setting

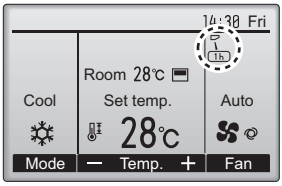


(Sample screen on City Multi)

Press the F1 or F2 button to go through the vane setting options: "AUTO," "Step 1," "Step 2," "Step 3," "Step 4," "Step 5," and "Swing."
Select the desired setting.

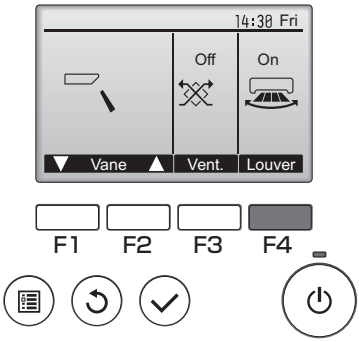


Select "Swing" to move the vanes up and down automatically.
When set to "Step 1" through "Step 5", the vane will be fixed at the selected angle.



- 1h under the vane setting icon
  This icon will appear when the vane is set to "Step 5" and the fan operates at low speed during cooling or dry operation (depends on the model).
  The icon will go off in an hour, and the vane setting will automatically change.

Louver setting



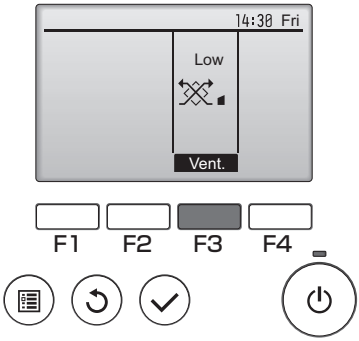
(Sample screen on City Multi)

Press the F4 button to turn the louver swing ON and OFF.

Off Off

On On

Vent. setting



(Sample screen on Mr. Slim)

Press the F3 button to go through the ventilation setting options in the order of "Off," "Low," and "High."

* Settable only when LOSSNAY unit is connected.

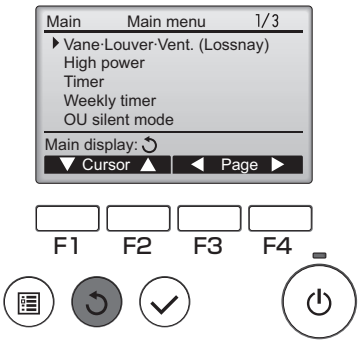
Off Off

Low Low

High High

• The fan on some models of indoor units may be interlocked with certain models of ventilation units.

Returning to the Main menu



Press the RETURN button to go back to the Main menu.

Controller operation-Function settings

High power

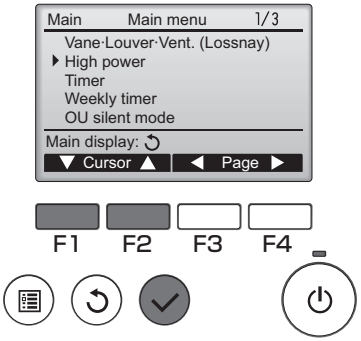
ON

Function description

High-power operation function allows the units to operate at higher-than-normal capacity so that the room air can be conditioned to an optimum temperature quickly. This operation will last for up to 30 minutes, and the unit will return to the normal operation mode at the end of the 30 minutes or when the room temperature reaches the preset temperature, whichever is earlier. The units will return to the normal operation when the operation mode or fan speed is changed.

Button operation

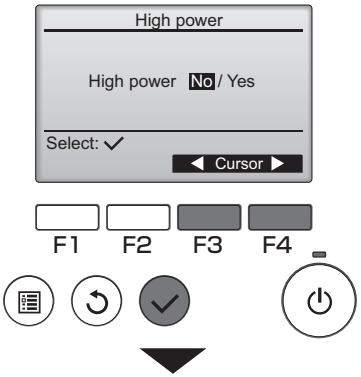
1



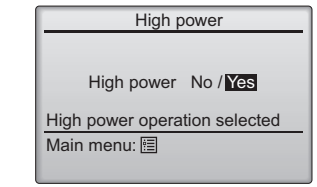
Select "High power" from the Main menu during Cooling, Heating, or AUTO operation (refer to page 20), and press the SELECT button.

"High power" function is available only on the models that support the function.

2



Move the cursor to "YES" with the F3 or F4 button, and press the SELECT button.



A confirmation screen will appear.

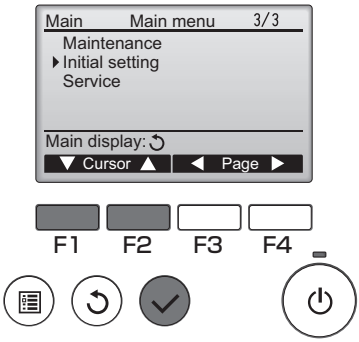
Navigating through the screens

- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button

Clock

Button operation

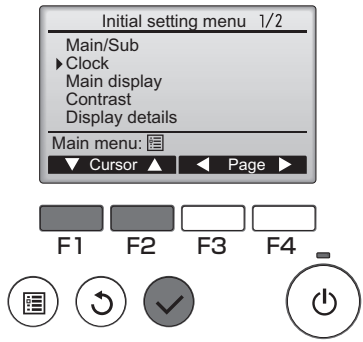
1



Select "Initial setting" from the Main menu (refer to page 20), and press the SELECT button.

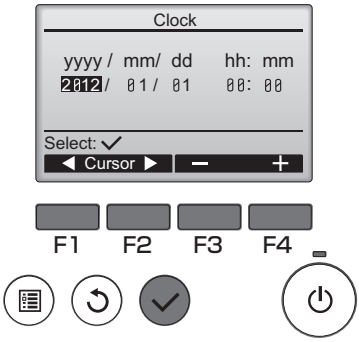
Clock setting is required before making the following settings.
- On/Off timer
- Weekly timer
- OU silent mode
- Energy saving
- Night setback

2



Move the cursor to the "Clock" with the F1 or F2 button, and press the SELECT button.

3



Move the cursor to the desired item with the F1 or F2 button out of year, month, date, hour, or minute.

Increase or decrease the value for the selected item with the F3 or F4 button, and press the SELECT button.
A confirmation screen will appear.

Navigating through the screens
- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button

Controller operation-Function settings

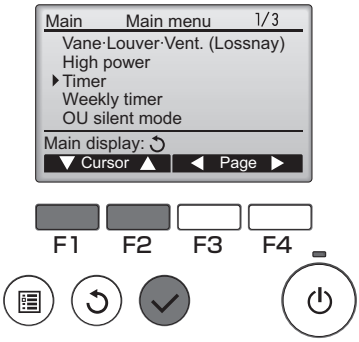
Timer

Main P

On/Off timer

Button operation

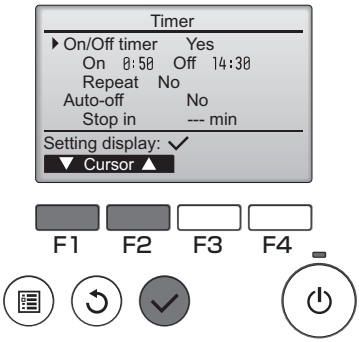
1



Select "Timer" from the Main menu (refer to page 20), and press the SELECT button.

The On/Off timer will not work in the following cases:
when On/Off timer is disabled, during an error, during check (in the service menu), during test run, during remote controller diagnosis, when the clock is not set, during Function setting, when the system is centrally controlled (when On/Off operation or Timer operation from local remote controller is prohibited).

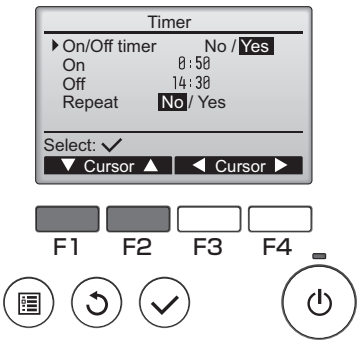
2



The current settings will appear.

Move the cursor to the On/Off timer, and press the SELECT button.

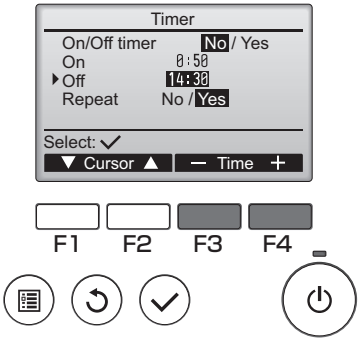
3



The screen to set the timer will appear.

Select the desired item with the F1 or F2 button out of "On/Off timer," "On," "Off," or "Repeat."

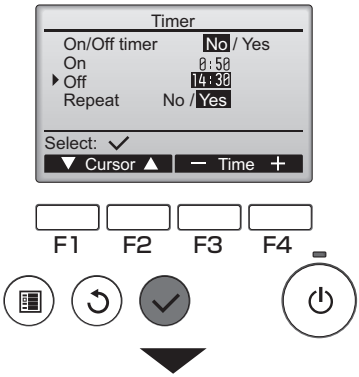
4



Change the setting with the F3 or F4 button.

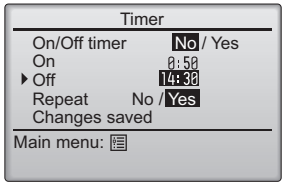
- On/Off timer: No (disable)/Yes (enable)
- On: Operation start time
  (settable in 5-minute increments)
  * Press and hold the button to rapidly advance the numbers.
- Off: Operation stop time
  (settable in 5-minute increments)
  * Press and hold the button to rapidly advance the numbers.
- Repeat: No (once)/Yes (repeat)

5



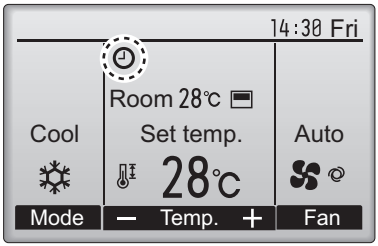
Press the SELECT button to save the settings.

A confirmation screen will appear.



Navigating through the screens

- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button



will appear on the Main display in the Full mode when the On/Off timer is enabled.

appears when the timer is disabled by the centralized control system.

Controller operation-Function settings

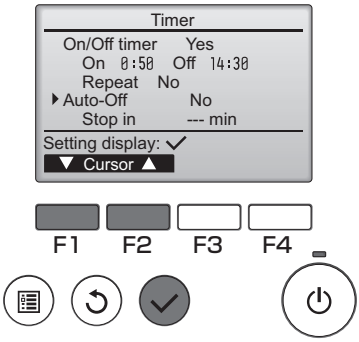
Timer

Main P

Auto-Off timer

Button operation

1

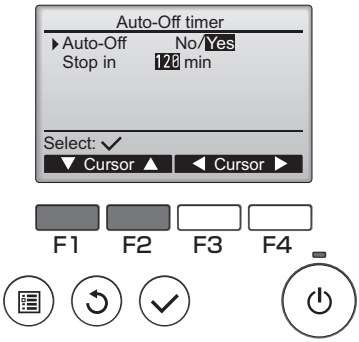


Bring up the Timer setting screen.
(Refer to page 26.)

Select "Auto-Off", and press the SELECT button.

The Auto-Off timer will not work in the following cases:
when Auto-Off timer is disabled, during an error, during check (in the service menu), during test run, during remote controller diagnosis, during Function setting, when the system is centrally controlled (when On/Off operation or Timer operation from local controller is prohibited).

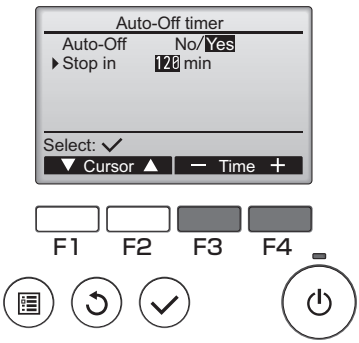
2



The current settings will appear.

Move the cursor to the "Auto-Off" or "Stop in --- min" with the F1 or F2 button.

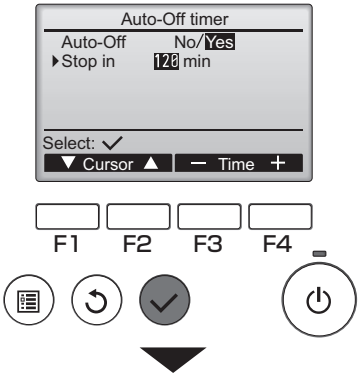
3



Change the setting with the F3 or F4 button.

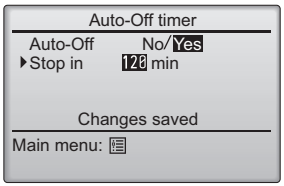
- Auto-Off: No (disable)/Yes (enable)
- Stop in --- min: Timer setting (The settable range is 30 to 240 minutes in 10-minute increments.)

4



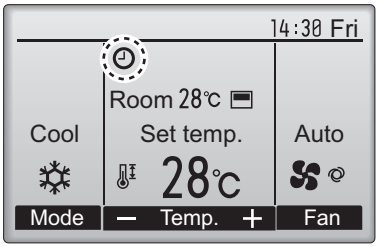
Press the SELECT button to save the settings.

A confirmation screen will appear.



Navigating through the screens

- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button



will appear on the Main display in the Full mode when the Auto-Off timer is enabled.

appears when the timer is disabled by the centralized control system.

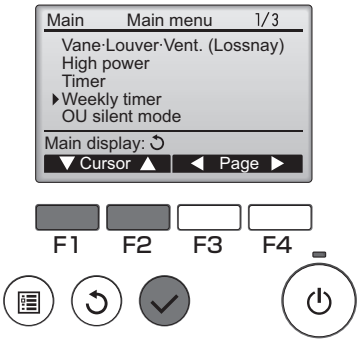
Controller operation-Function settings

Weekly timer

Main P

Button operation

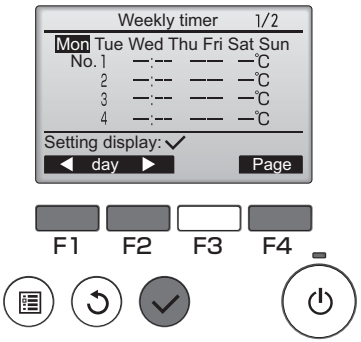
1



Select "Weekly timer" from the Main menu (refer to page 20), and press the SELECT button.

The Weekly timer will not work in the following cases: when the On/Off timer is enabled, when the weekly timer is disabled, during an error, during check (in the service menu), during test run, during remote controller diagnosis, when the clock is not set, during Function setting, when the system is centrally controlled (On/Off operation, temperature setting, or Timer operation from local remote controller is prohibited).

2

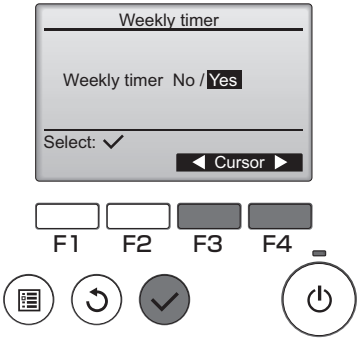


The current settings will appear.

Press the F1 or F2 button to see the settings for each day of the week.
Press the F4 button to see patterns 5 through 8.

Press the SELECT button to go to the setting screen.

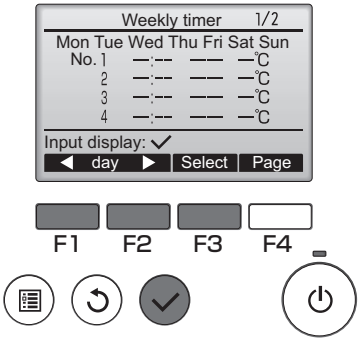
3



The screen to enable (Yes) and disable (No) the weekly timer will appear.

To enable the setting, move the cursor to "Yes" with the F3 or F4 button, and press the SELECT button.

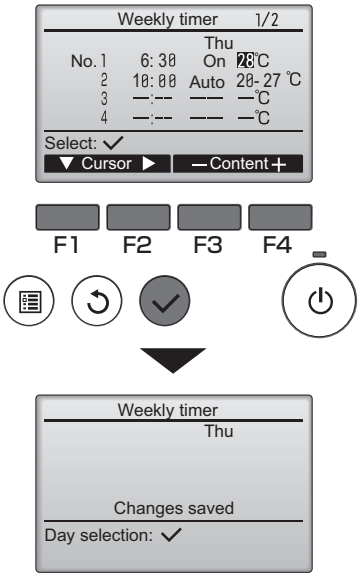
4



The weekly timer setting screen will appear and the current settings will be displayed.
Up to eight operation patterns can be set for each day.
Move the cursor to the desired day of the week with the F1 or F2 button, and press the F3 button to select it. (Multiple days can be selected.)

Press the SELECT button.

5



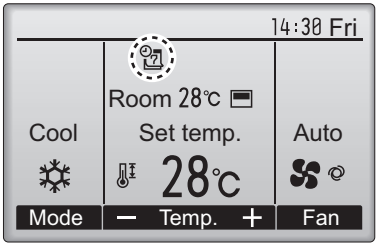
Operation pattern setting screen will appear.
Press the F1 button to move the cursor to the desired pattern number.
Move the cursor to the time, On/Off, or temperature with the F2 button.
Change the settings with the F3 or F4 button.

- Time: settable in 5-minute increments
  * Press and hold the button to rapidly advance the numbers.
- On/Off/Auto: Selectable settings depend on the model of connected indoor unit. (When an Auto pattern is executed, the system will operate in the Auto (dual set point) mode.)
- Temperature: The settable temperature range depends on the connected indoor units. (1ºC increments) When the Auto (dual set point) mode is selected, two preset temperatures can be set. If an operation pattern with a single preset temperature setting is executed during the Auto (dual set point) mode, its setting will be used as the cooling temperature setting in the Cool mode.

Press the SELECT button to save the settings.
A confirmation screen will appear.

Navigating through the screens

- To go back to the setting change/day of the week selection screen ..... SELECT button
- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button



will appear on the Main display in the Full mode when the weekly timer setting for the current day exists.
The icon will not appear while the On/Off timer is enabled or the system is under centralized control (Timer operation from local remote controller is prohibited).

Controller operation-Function settings

OU silent mode

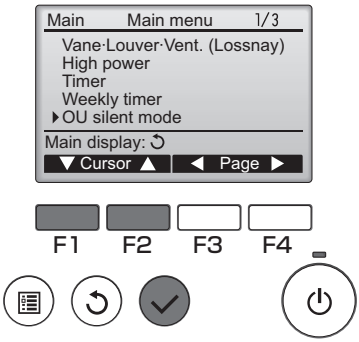
Main P

Function description

This function allows the user to set the time periods in which priority is given to quiet operation of outdoor units over temperature control. Set the start and stop times each day of the week for the quiet operation. Select the desired silent level from "Middle" and "Quiet".

Button operation

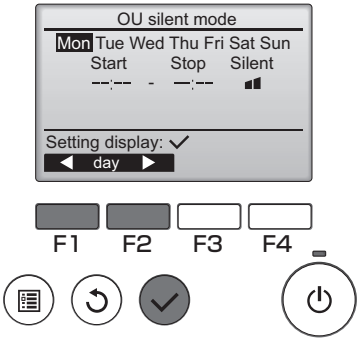
1



Select "OU silent mode" from the Main menu (refer to page 20), and press the SELECT button.

"OU silent mode" function is available only on the models that support the function.

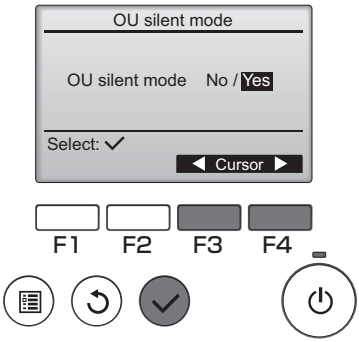
2



The current settings will appear.

Press the F1 or F2 button to see the settings for each day of the week.
Press the SELECT button to go to the setting screen.

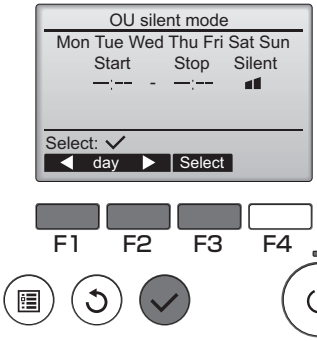
3



The screen to enable (Yes) and disable (No) the silent mode will appear.

To enable this setting, move the cursor to "Yes" with the F3 or F4 button, and press the SELECT button .

4

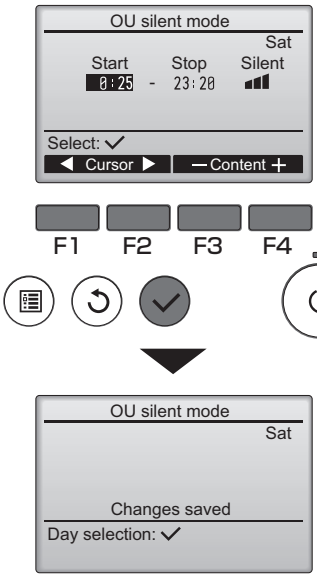


The OU silent mode setting screen will appear.

To make or change the setting, move the cursor to the desired day of the week with the F1 or F2 button, and press the F3 button to select it. (Multiple days can be selected.)

Press the SELECT button.

5



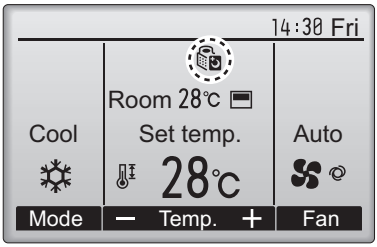
The setting screen will appear.
Move the cursor to the desired item with the F1 or F2 button out of Start time, Stop time, or Silent level.
Change the settings with the F3 or F4 button.

- Start/Stop time: settable in 5-minute increments
  * Press and hold the button to rapidly advance the numbers.
- Silent level: Normal, Middle, Quiet

Normal Middle Quiet

Press the SELECT button to save the settings.
A confirmation screen will appear.

Navigating through the screens
- To go back to the setting change/day of the week selection screen ..... SELECT button
- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button



will appear on the Main display in the Full mode during the OU silent mode.

Controller operation-Function settings

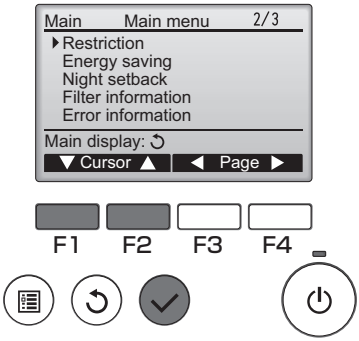
Restriction

P

Setting the temperature range restriction

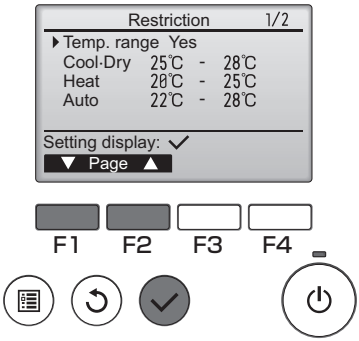
Button operation

1



Select "Restriction" from the Main menu (refer to page 20), and press the SELECT button.

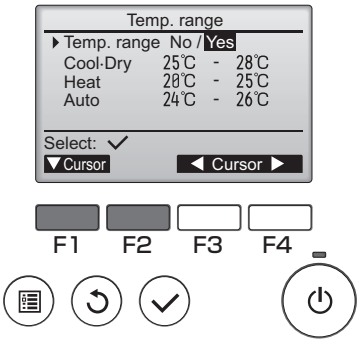
2



The current settings will appear.

Move the cursor to "Temp. range" with the F1 or F2 button, and press the SELECT button.

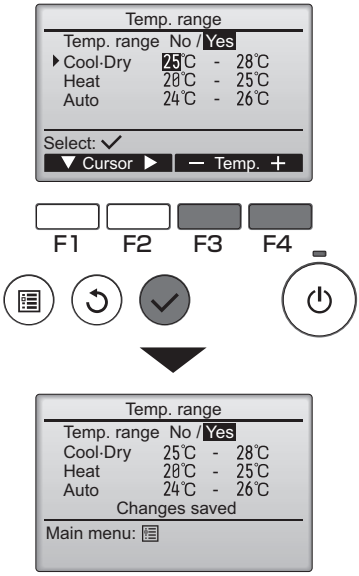
3



The screen to set the temperature range will appear.

Move the cursor to the desired item with the F1 button out of "Temp. range," "Cool•Dry," "Heat," or "Auto."

4



Change the settings with the F3 or F4 button.

- Temp. range: No (unrestricted) or Yes (restricted)
- Cool•Dry: Upper and lower limit temperature (1ºC increments)
- Heat: Upper and lower limit temperature (1ºC increments)
- Auto: Upper and lower limit temperature (1ºC increments)

Temperature setting ranges

Mode	Lower limit	Upper limit
Cool•Dry *1 *3	19 ~ 30ºC (67 ~ 87ºF)	30 ~ 19ºC (87 ~ 67ºF)
Heat *2 *3	17 ~ 28ºC (63 ~ 83ºF)	28 ~ 17ºC (83 ~ 63ºF)
Auto *4	19 ~ 28ºC (67 ~ 83ºF)	28 ~ 19ºC (83 ~ 67ºF)

* The settable range varies depending on the connected unit.

*1 Temperature ranges for the Cool, Dry, and Auto (dual set point) modes can be set.

*2 Temperature ranges for the Heat and Auto (dual set point) modes can be set.

*3 Temperature ranges for the Heat, Cool, and Dry modes must meet the conditions below:

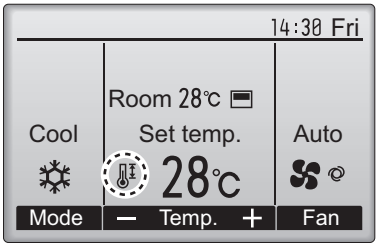
- Upper limit for cooling - upper limit for heating ≥ Minimum temperature difference (varies with indoor unit model)
- Lower limit for cooling - lower limit for heating ≥ Minimum temperature difference (varies with indoor unit model)

*4 Temperature range for the Auto (single set point) mode can be set.

Press the SELECT button to save the settings.
A confirmation screen will appear.

Navigating through the screens

- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button



will appear on the Main display in the Full mode when the temperature range is restricted.

Controller operation-Function settings

Restriction

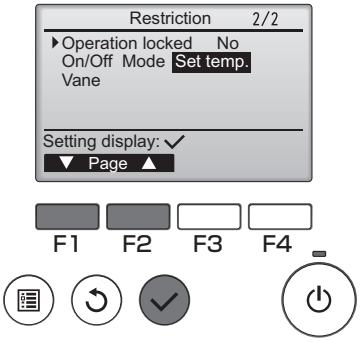
P

Operation lock function

To enable the operation lock function, set the item "Operation locked" to " Yes".

Button operation

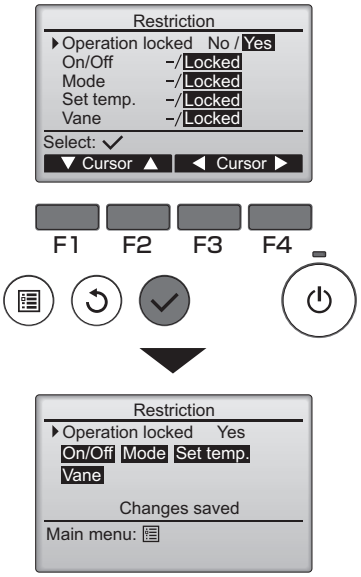
1



Bring up the Restriction setting screen. (Refer to page 34.)

Move the cursor to "Operation locked" and press the SELECT button.

2



The screen to make the settings for the operation lock function will appear.

Move the cursor to the desired item with the F1 or F2 button out of "Operation locked," "On/Off," "Mode," "Set temp.," or "Vane."

Change the settings with the F3 or F4 button.

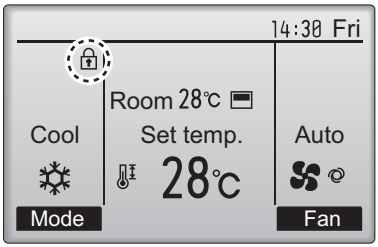
- Operation locked: No (disable)/Yes (enable)
- On/Off: On/Off operation
- Mode: Operation mode setting
- Set temp.: Preset temp. setting
- Vane: Vane setting

"-" / "Locked"

Press the SELECT button to save the settings. A confirmation screen will appear.

Navigating through the screens

- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button



(When Set temp. is locked)

will appear on the Main display in the Full mode when the operation lock function setting is enabled.

Operation guide that corresponds to the locked function will be suppressed.

Controller operation-Function settings

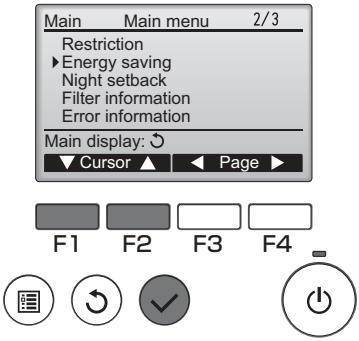
Energy saving

Main P

Automatic return to the preset temperature

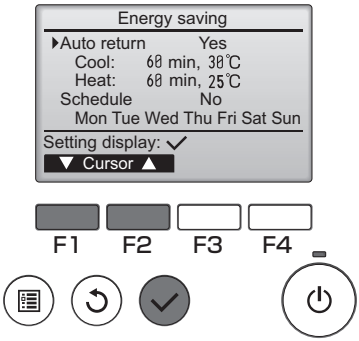
Button operation

1



Select "Energy saving" from the Main menu (refer to page 20), and press the SELECT button.

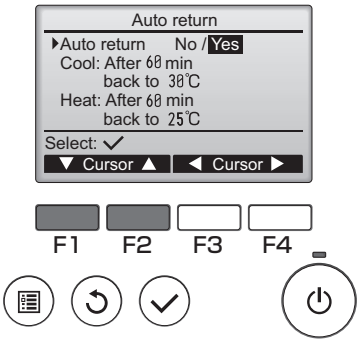
2



The current settings will appear.

Move the cursor to "Auto return" with the F1 or F2 button, and press the SELECT button.

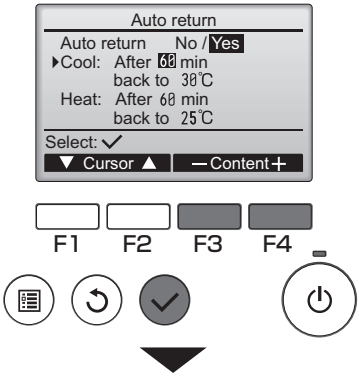
3

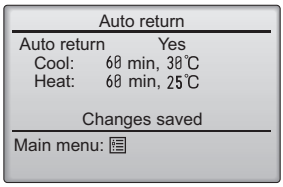


The screen to make the settings for the automatic return to the preset temperature will appear.

Move the cursor to the desired item with the F1 or F2 button out of "Auto return," "Cool," or "Heat."

4





Change the settings with the F3 or F4 button.

- Auto return: No (disable)/Yes (enable)
- Cool: Timer setting range is 30 to 120 minutes in 10-minute increments.
  Temperature setting range is 19 to 30ºC (67 to 87ºF) (1ºC increments).
- Heat: Timer setting range is 30 to 120 minutes in 10-minute increments.
  Temperature setting range is 17 to 28ºC (63 to 83ºF) (1ºC increments).

Press the SELECT button to save the settings.
"Cool" includes "Dry" and "AUTO Cooling" modes, and "Heat" includes "AUTO Heating" mode.
The screen to set the selected item will appear.

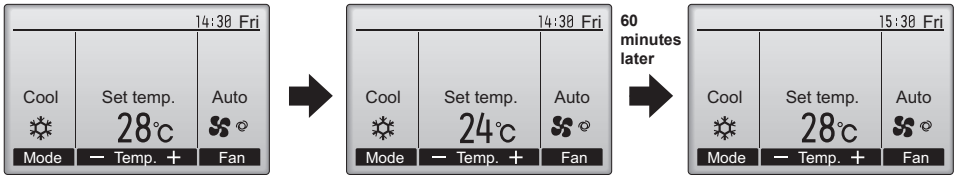
Navigating through the screens

- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button

The above Timer or Preset temperature settings will not be effective when the Temp. range is restricted and when the system is centrally controlled (when the Temp. range setting from local controller is prohibited). When the system is centrally controlled (when Timer operation from local remote controller is prohibited), only the Timer setting will be ineffective.

<Sample screens when the Auto return function is enabled>

Example: Lower the Set temp. to 24ºC (75ºF). 60 minutes later, the Set temp. will be back to 28ºC (83ºF).



The Set temp. is changed from 28ºC (83ºF) to 24ºC (75ºF) by a user.

60 minutes later, the Set temp. returns to 28ºC (83ºF) automatically.

Controller operation-Function settings

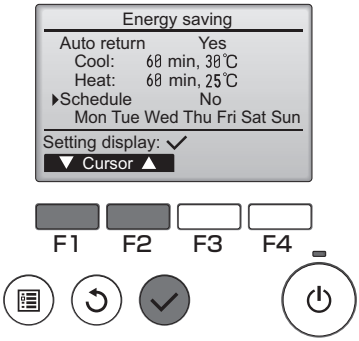
Energy saving

Main P

Setting the energy-saving operation schedule

Button operation

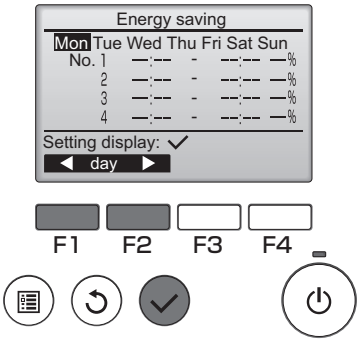
1



Bring up the "Energy saving" screen. (Refer to page 38.)

Move the cursor to the "Schedule," and press the SELECT button.

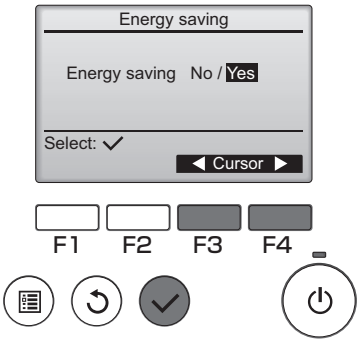
2



The screen to see the schedule will appear.

Press the F1 or F2 button to see the settings for each day of the week.
Press the SELECT button to go to the setting screen.

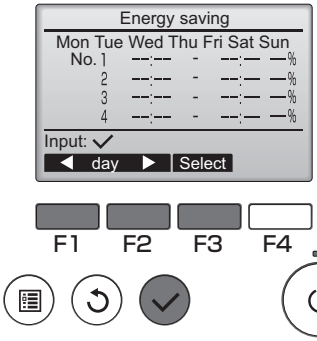
3



The screen to enable (Yes)/disable (No) the energy-saving operation schedule will appear.

Select "No" or "Yes" with the F3 or F4 button.
Press the SELECT button to go to the setting change/day of the week selection screen.

4



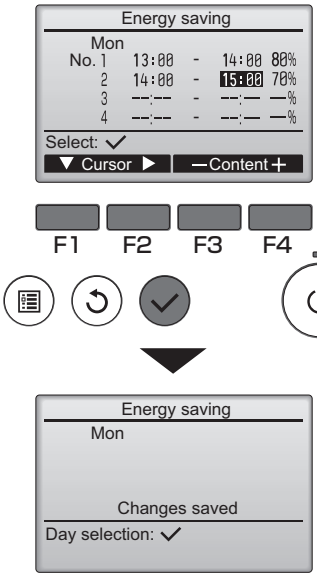
The setting change/day of the week selection screen will appear.

Up to four operation patterns can be set for each day.

Move the cursor to the desired day of the week with the F1 or F2 button, and press the F3 button to select it. (Multiple days can be selected.)

Press the SELECT button to go to the pattern setting screen.

5



The pattern setting screen will appear.

Press the F1 button to move the cursor to the desired pattern number.

Move the cursor to the desired item with the F2 button out of the start time, stop time, and energy-saving rate (arranged in this order from the left).

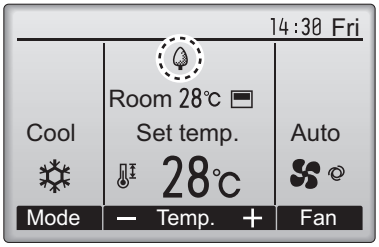
Change the settings with the F3 or F4 button.

- Start/Stop time: settable in 5-minute increments
  * Press and hold the button to rapidly advance the numbers.
- Energy-saving rate: The setting range is 0% and 50 to 90% in 10% increments.

Press the SELECT button to save the settings.

A confirmation screen will appear.

> The lower the value, the greater the energy-saving effect.



will appear on the Main display in the Full mode when the unit is operated in the energy saving mode.

Navigating through the screens

- To go back to the setting change/day of the week selection screen ..... SELECT button
- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button

Controller operation-Function settings

Night setback

Main P

Function description

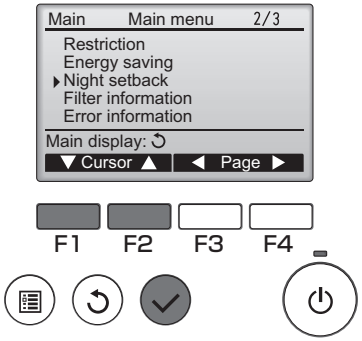
This control starts heating operation when the control object group is stopped and the room temperature drops below the preset lower limit temperature. Also, this control starts cooling operation when the control object group is stopped and the room temperature rises above the preset upper limit temperature.

The Night setback function is not available if the operation and the temperature setting are performed from the remote controller.

If the room temperature is measured by the air-conditioner's suction temperature sensor, the accurate temperature may not be obtained when the air-conditioner is inactive or when the air is not clean. In this case, switch the sensor to a remote sensor (PAC-SE40TSA/PAC-SE41TS-E) or a remote control sensor.

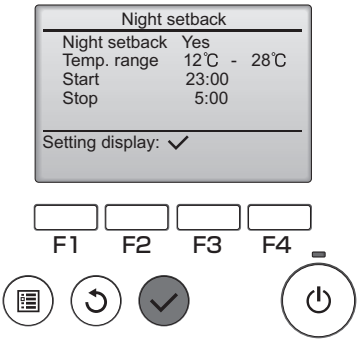
Button operation

1



Select "Night setback" from the Main menu (refer to page 20), and press the SELECT button.

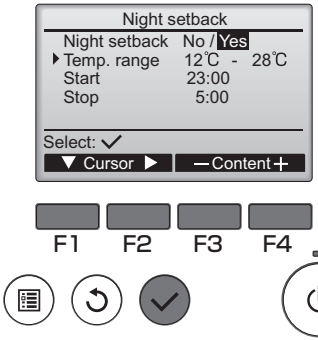
2

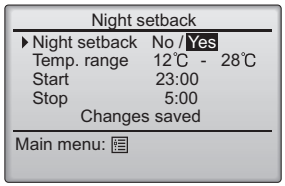


The current settings will appear.

Press the SELECT button to go to the setting screen.

3





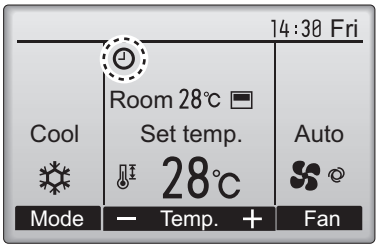
Move the cursor to the desired item with the F1 or F2 button out of Night setback No (disable)/ Yes (enable), Temp. range, Start time, or Stop time.

Change the settings with the F3 or F4 button.

- Temp. range: The lower limit temperature (for heating operation) and the upper limit temperature (for cooling operation) can be set. The temperature difference between the lower and upper limits must be 4ºC (8ºF) or more. The settable temperature range varies depending on the connected indoor units.
- Start/Stop time: settable in 5-minute increments
  * Press and hold the button to rapidly advance the numbers.

Press the SELECT button to save the settings. A confirmation screen will appear.

Navigating through the screens
- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button



will appear on the Main display in the Full mode when the Night setback function is enabled.

appears when the timer is disabled by the centralized control system.

The Night setback will not work in the following cases: when the unit is in operation, when the Night setback function is disabled, during an error, during check (in the service menu), during test run, during remote controller diagnosis, when the clock is not set, during Function setting, when the system is centrally controlled (On/Off operation, temperature setting, or Timer operation from local remote controller is prohibited).

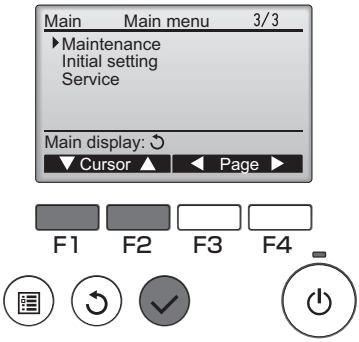
Controller operation-Function settings

Manual vane angle

Main OFF

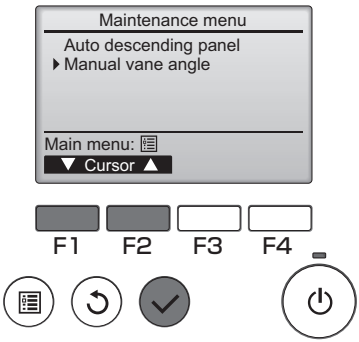
Button operation

1



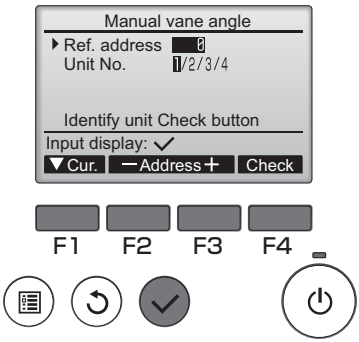
Select "Maintenance" from the Main menu (refer to page 20), and press the SELECT button.

2



Select "Manual vane angle" with the F1 or F2 button, and press the SELECT button.

3



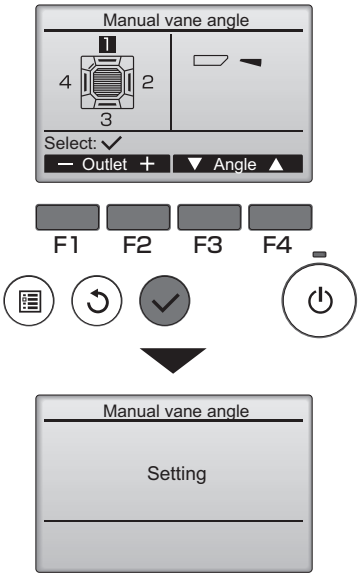
Move the cursor to "Ref. address" or "Unit No." with the F1 button to select.
Select the refrigerant address and the unit number for the units to whose vanes are to be fixed, with the F2 or F3 button, and press the SELECT button.

- Ref. address: Refrigerant address
- Unit No.: 1, 2, 3, 4

Press the F4 button to confirm the unit.

The screen at left shows a sample display on Mr. Slim. On City Multi units, "M-NET address," is displayed instead of "Ref. address", and the "Unit No." will not be displayed.

4



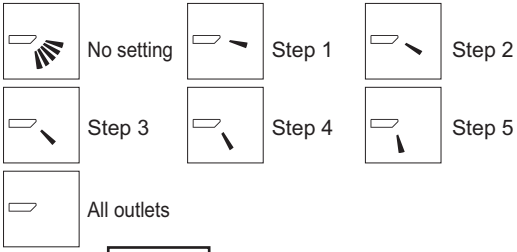
The current vane setting will appear.

Select the desired outlets from 1 through 4 with the F1 or F2 button.

• Outlet: "1," "2," "3," "4," and "1, 2, 3, 4, (all outlets)"

Press the F3 or F4 button to go through the option in the order of "No setting (reset)," "Step 1," "Step 2," "Step 3," "Step 4," and "Step 5." Select the desired setting.

■ Vane setting



Press the SELECT button to save the settings.

A screen will appear that indicates the setting information is being transmitted.

The setting changes will be made to the selected outlet.

The screen will automatically return to the one shown above (step 4) when the transmission is completed.

Make the settings for other outlets, following the same procedures.

If all outlets are selected, ▭ will be displayed the next time the unit goes into operation.

Navigating through the screens

• To go back to the Main menu ..... MENU button

• To return to the previous screen ..... RETURN button

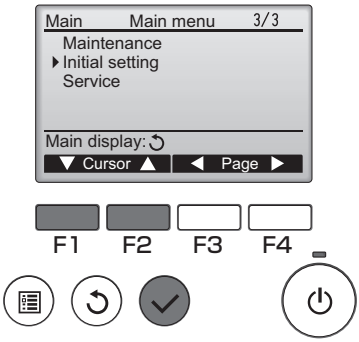
Controller operation-Function settings

Main display

P

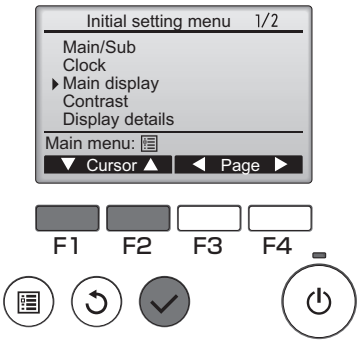
Button operation

1



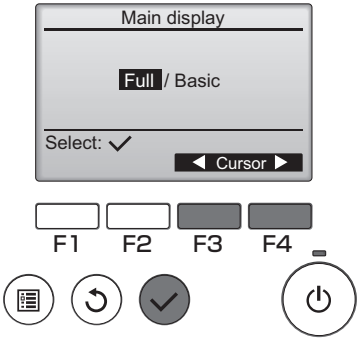
Select "Initial setting" from the Main menu (refer to page 20), and press the SELECT button.

2



Move the cursor to the "Main display" with the F1 or F2 button, and press the SELECT button.

3



Select "Full" or "Basic" (refer to page 8) with the F3 or F4 button, and press the SELECT button.

A confirmation screen will appear.

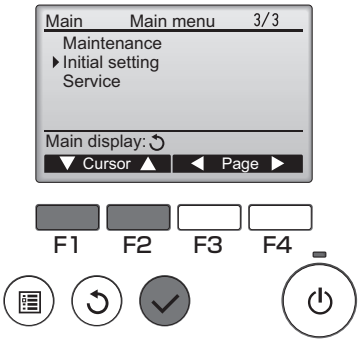
Navigating through the screens
- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button

Contrast

P

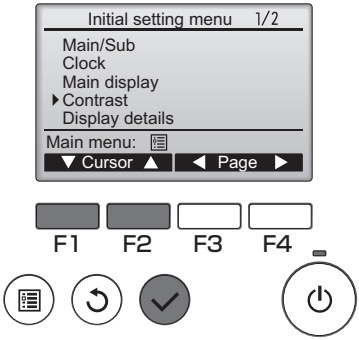
Button operation

1



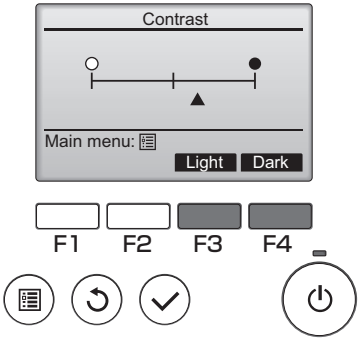
Select "Initial setting" from the Main menu (refer to page 20), and press the SELECT button.

2



Move the cursor to the "Contrast" with the F1 or F2 button, and press the SELECT button.

3



Adjust the contrast with the F3 or F4 button, and press the MENU or RETURN button.

Navigating through the screens
- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button

Controller operation-Function settings

Language selection

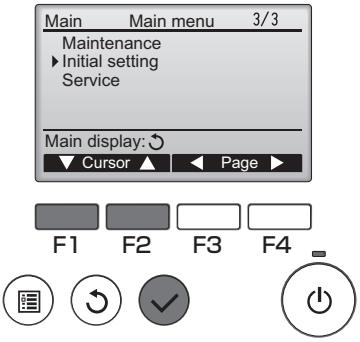
P

Function description

The desired language can be set. The language options are English, French, German, Spanish, Italian, Portuguese, Swedish, and Russian.

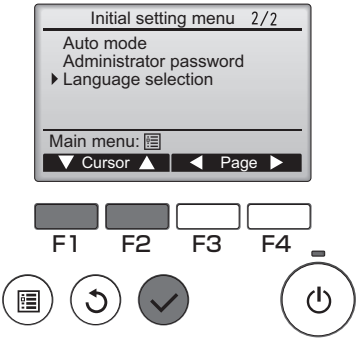
Button operation

1



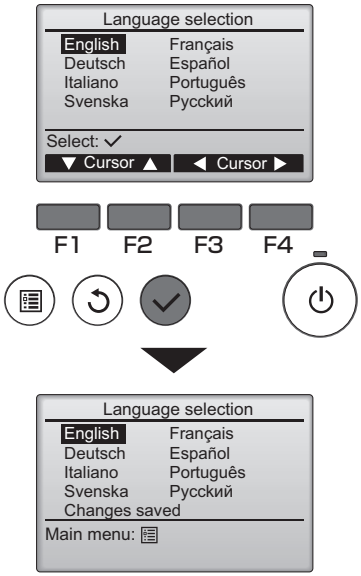
Select "Initial setting" from the Main menu (refer to page 20), and press the SELECT button.

2



Move the cursor to the "Language selection" with the F1 or F2 button, and press the SELECT button.

3



Move the cursor to the language you desire with the F1 through F4 buttons, and press the SELECT button to save the setting.

When the power is on for the first time, the Language selection screen will be displayed. Select a desired language. The system will not start-up without language selection.

A screen will appear that indicates the setting has been saved.

Navigating through the screens
- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button

Controller operation-Function settings

Function setting (City Multi)

OFF P

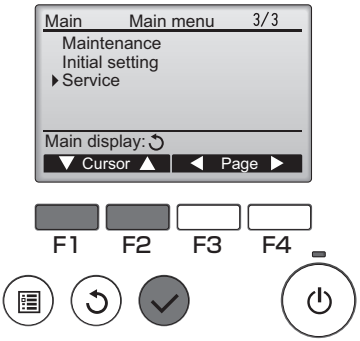
Function description

Make the indoor units' function settings from the remote controller as necessary.

- The following settings should be made only for City Multi units and as necessary.
- Refer to the Installation Manual for how to make the settings for Mr. Slim units.
- Refer to the indoor unit Installation Manual for information about the factory settings of indoor units, function setting numbers, and setting values.
- When changing the indoor units' function settings, record all the changes made to keep track of the settings.

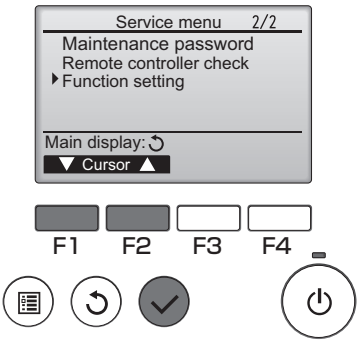
Button operation

1



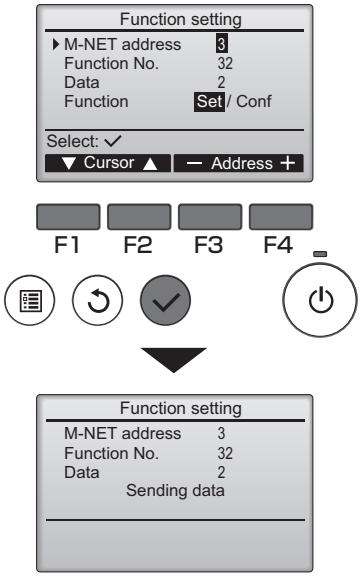
Select Service on the Main menu (see page 20), and press the SELECT button.

2



Select Function Setting on the Service Menu screen, and press the SELECT button.

3

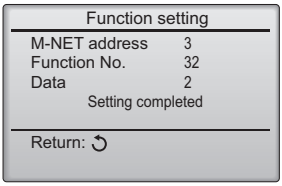


The Function Setting screen will appear.
Press the F1 or F2 button to move the cursor to one of the following: M-NET address, function setting number, or setting value. Then, press the F3 or F4 button to change the settings to the desired settings.

Once the settings have been completed, press the SELECT button.
A screen will appear that indicates that the settings information is being sent.

> To check the current settings of a given unit, enter the setting for its M-NET address and function setting number, select Conf for the Function, and press the SELECT button.
> A screen will appear that indicates that the settings are being searched for. When the search is done, the current settings will appear.

4



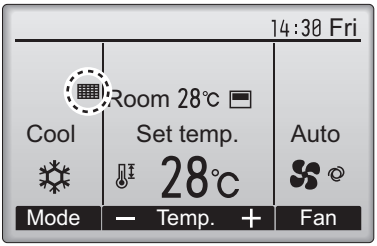
When the settings information has been sent, a screen will appear that indicates its completion.

To make additional settings, press the RETURN button to return to the screen shown in Step 3 above. Set the function numbers for other indoor units by following the same steps.

> Navigating through the screens
> • To return to the Service Menu screen ..... MENU button
> • To return to the previous screen ..... RETURN button

Maintenance

Filter information

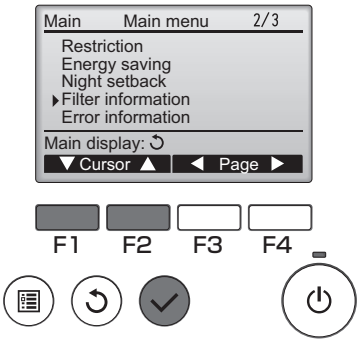


will appear on the Main display in the Full mode when it is time to clean the filters.

Wash, clean, or replace the filters when this sign appears.
Refer to the indoor unit Instructions Manual for details.

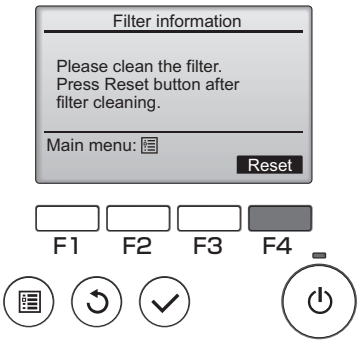
Button operation

1



Select "Filter information" from the Main menu (refer to page 20), and press the SELECT button.

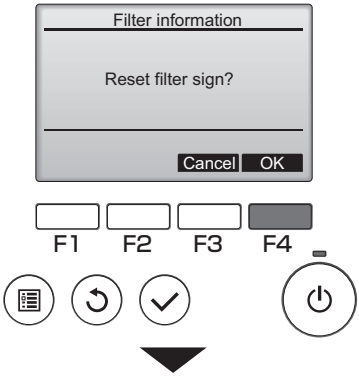
2



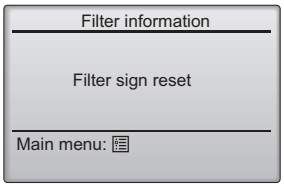
Press the F4 button to reset filter sign.

Refer to the indoor unit Instructions Manual for how to clean the filter.

3

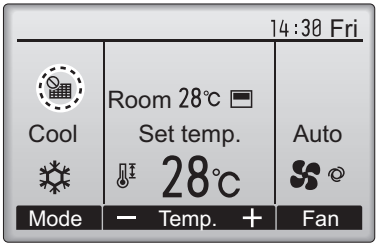


Select "OK" with the F4 button.



A confirmation screen will appear.

Navigating through the screens
- To go back to the Main menu ..... MENU button
- To return to the previous screen ..... RETURN button



When the is displayed on the Main display in the Full mode, the system is centrally controlled and the filter sign cannot be reset.

If two or more indoor units are connected, filter cleaning timing for each unit may be different, depending on the filter type.

The icon will appear when the filter on the main unit is due for cleaning.

When the filter sign is reset, the cumulative operation time of all units will be reset.

The icon is scheduled to appear after a certain duration of operation, based on the premise that the indoor units are installed in a space with ordinary air quality. Depending on the air quality, the filter may require more frequent cleaning.

The cumulative time at which filter needs cleaning depends on the model.

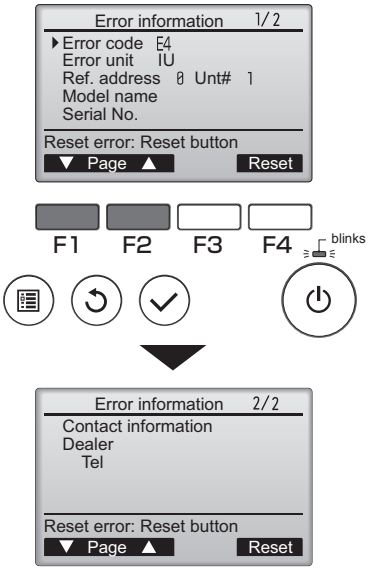
Troubleshooting

Error information

When an error occurs, the following screen will appear.
Check the error status, stop the operation, and consult your dealer.

Button operation

1

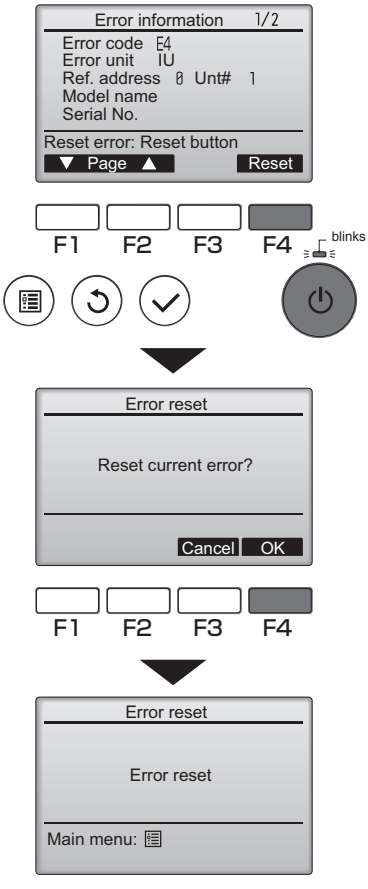


Error code, error unit, refrigerant address, unit model name, and serial number will appear.
The model name and serial number will appear only if the information have been registered.

Press the F1 or F2 button to go to the next page.

Contact information (dealer's phone number) will appear if the information have been registered.

2



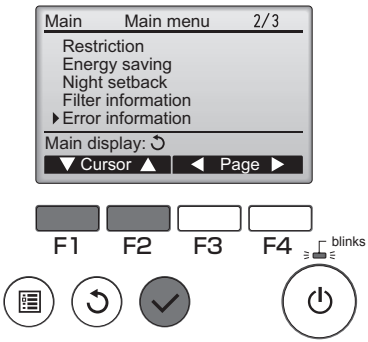
Press the F4 button or the ON/OFF button to reset the error that is occurring.

Errors cannot be reset while the ON/OFF operation is prohibited.

Select "OK" with the F4 button.

Navigating through the screens
• To go back to the Main menu ..... MENU button

Checking the error information



While no errors are occurring, page 2/2 of the error information (refer to page 54) can be viewed by selecting "Error information" from the Main menu (refer to page 20).
Errors cannot be reset from this screen.

Specifications

Controller specifications

	Specification
Product size	120(W) x 120(H) x 19(D) mm (4 3/4 x 4 3/4 x 3/4 [in]) (not including the protruding part)
Net weight	0.25 kg (9/16 lb.)
Rated power supply voltage	12 VDC (supplied from indoor units)
Power consumption	0.3 W
Usage environment	Temperature 0 ~ 40ºC (32 ~ 104ºF) Humidity 30 ~ 90%RH (with no dew condensation)
Material	Panel: PMMA Main body: PC + ABS

Function list (as of December 1, 2012)

○ : Supported ×: Unsupported

	Function	City Multi	Mr. Slim	Required password
Operation/ Display	Power ON/OFF	○	○	-
	Operation mode switch	○	○	-
	Room temperature setting	○	○	-
	Auto (dual set point) mode	○	×	-
	Fan speed setting	○	○	-
	Vane angle setting	○	○	-
	Louver setting	○	○	-
	Ventilation setting	○	○	-
	High power operation	×	○	-
	Auto descending panel	○	○	-
	Backlight	○	○	-
	Contrast setting	○	○	administrator
	Main display mode switch	○	○	administrator
	Clock setting	○	○	administrator
	Clock display format setting	○	○	administrator
	Language selection (8 languages)	○	○	administrator
	Room temperature display	○	○	administrator
	Error display	○	○	-
	Filter information	○	○	-
Schedule/ Timer	On/Off timer	○	○	administrator
	Auto-off timer	○	○	administrator
	Weekly timer	○	○	administrator
	Night setback	○	○	administrator
	OU silent mode	×	○	administrator
Energy saving	Auto return	○	○	administrator
	Schedule	×	○	administrator
Restriction	Operation lock	○	○	administrator
	Temperature range restriction	○	○	administrator
	Password (Administrator and Maintenance)	○	○	administrator maintenance
Others	Manual vane angle	○	○	-
	Test run	○	○	maintenance
	Model information input	○	○	maintenance
	Dealer information input	○	○	maintenance
	Function setting	○	○	maintenance
	Smooth maintenance	×	○	maintenance
	Refrigerant volume check	×	○	maintenance
	Refrigerant leak check	×	○	maintenance

* The supported functions vary depending on the unit model.

List of functions that can/cannot be used in combination

	High power	On/Off timer	Auto-off timer	Weekly timer	OU silent mode	Temperature range	Operation lock	Auto return	Energy saving schedule	Night setback
High power		○	○	○	△1	○	△2	○	△1	○
On/Off timer	○		○	×1	○	○	○	○	○	△3
Auto-off timer	○	○		○	○	○	○	○	○	△4
Weekly timer	○	×1	○		○	○	○	○	○	△5
OU silent mode	△1	○	○	○		○	○	○	○	○
Temperature range	○	○	○	○	○		○	×2	○	△6
Operation lock	△2	○	○	○	○	○		○	○	○
Auto return	○	○	○	○	○	×2	○		○	△7
Energy saving schedule	△1	○	○	○	○	○	○	○		○
Night setback	○	△3	△4	△5	○	△6	○	△7	○	

○ : Can be used in combination ×: Cannot be used in combination △: Restricted

△1: This function is enabled after completing the high power operation because the high power operation has the higher priority.
△2: This function cannot be operated if some operation is locked.
△3: Night setback function cannot be used when the unit is in operation by On/Off timer setting.
△4: Auto-off function cannot be used for Night setback operation.
△5: Night setback function cannot be used when the unit is in operation by Weekly timer setting.
△6: Temperature range setting cannot be used for Night setback operation.
△7: Auto return function cannot be used for Night setback operation.

×1: Weekly timer setting is not effective because On/Off timer has the higher priority.
×2: Auto return function cannot be used because Temperature range setting has the higher priority.

This product is designed and intended for use in the residential, commercial, and light-industrial environment.

The product at hand is based on the following EU regulations:
• Low Voltage Directive 2006/95/EC
• Electromagnetic Compatibility Directive 2004/108/EC

MITSUBISHI ELECTRIC CORPORATION
HEAD OFFICE: TOKYO BLDG. , 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN
Authorized representative in EU: MITSUBISHI ELECTRIC EUROPE B.V.
HARMAN HOUSE, 1 GEORGE STREET, UXBRIDGE, MIDDLESEX UB8 1QQ, U.K.
WT06693X01